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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
10/767,633	01/29/2004	Richard S. Smith	59503US002	5407		
32692 7590 11/14/2006			EXAM	EXAMINER		
3M INNOVA	TIVE PROPERTIES CO	MARCHESCHI	MARCHESCHI, MICHAEL A			
PO BOX 33427 ST. PAUL, MN		ART UNIT	PAPER NUMBER			
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			DATE MAIL ED: 11/14/2006			

Please find below and/or attached an Office communication concerning this application or proceeding.

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		Application No	<b>).</b>	Applicant(s)			
Office Action Summary		10/767,633		SMITH ET AL.			
		Examiner		Art Unit			
		Michael A. Mar		1755			
Period fo	The MAILING DATE of this communication app or Reply	pears on the cov	er sheet with the c	orrespondence addre	<del>?</del> SS		
WHIC - Exte after - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DAISSIONS of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. O period for reply is specified above, the maximum statutory period ware to reply within the set or extended period for reply will, by statute, reply received by the Office later than three months after the mailing ed patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS C 36(a). In no event, ho will apply and will expire, cause the application	COMMUNICATION wever, may a reply be tim e SIX (6) MONTHS from to become ABANDONE	N. nely filed the mailing date of this comm D (35 U.S.C. § 133).	,		
Status							
1)[🖂	Responsive to communication(s) filed on 31 Au	uaust 2006.					
·	This action is <b>FINAL</b> . 2b)⊠ This action is non-final.						
3)[	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
	closed in accordance with the practice under E	Ex parte Quayle,	1935 C.D. 11, 45	i3 O.G. 213.			
Disposit	ion of Claims						
5)□ 6)⊠ 7)□	Claim(s) <u>1-18</u> is/are pending in the application.  4a) Of the above claim(s) <u>16</u> is/are withdrawn for Claim(s) is/are allowed.  Claim(s) <u>1-15,17 and 18</u> is/are rejected.  Claim(s) is/are objected to.  Claim(s) are subject to restriction and/or	rom considerati					
Applicati	ion Papers						
	The specification is objected to by the Examine	er					
·	The drawing(s) filed on is/are: a) acce		ojected to by the E	Examiner.			
	Applicant may not request that any objection to the	drawing(s) be hel	d in abeyance. See	∋ 37 CFR 1.85(a).			
	Replacement drawing sheet(s) including the correct		- · · · •		• •		
11)	The oath or declaration is objected to by the Ex	caminer. Note th	e attached Office	Action or form PTO-	·152.		
Priority (	under 35 U.S.C. § 119						
a)	Acknowledgment is made of a claim for foreign  All b) Some * c) None of:  1. Certified copies of the priority documents  2. Certified copies of the priority documents  3. Copies of the certified copies of the prior application from the International Bureau  See the attached detailed Office action for a list of	s have been rec s have been rec rity documents h u (PCT Rule 17.	ceived. ceived in Application nave been receive 2(a)).	on Noed in this National Sta	age		
Attachmen	t(s)						
1) 🛭 Notic	e of References Cited (PTO-892)	4)	Interview Summary	(PTO-413)	•		
2)  Notic 3)  Inform	e of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08)	5)	Paper No(s)/Mail Da  Notice of Informal Pa		52)		
Pape	r No(s)/Mail Date	6) L	Other:	•			

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The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 8/31/06 has been entered.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-8, 12, 13, 17 and 18 are rejected under 35 U.S.C. 102(e) as anticipated by or in the alternative under 35 U.S.C. 103(a) as obvious over Garabedian et al. (406).

Garabedian et al. teaches in sections [0054]-[0055], [0084]-[0086], [0090], [0099], [0139]-[0142], [0157]-[0158] and [0202-0203], a composition comprising, in weight percent (1) 0-10% of an emulsifier (surfactant), (2) 0.001-30% of a mixture of a solvent (i.e. mixture of a volatile silicone (octamethylcyclotetrasiloxane) and volatile hydrocarbon), (3) a thickener, (4) 0.01-1% oxide nanoparticles (i.e. this encompasses aluminum oxide (this is an abrasive) because

it is within the scope of the definition of nanoparticles (i.e. oxides)), (5) and 0-1% of glycerin or oleic acid and (6) 5-70% water. No "non-volatile silicone material" needs to be present.

The claimed invention is anticipated by the reference because the reference teaches a composition which comprises all of the claimed components. With respect to the boiling point of the volatile siloxane, since the material is the same it inherently has the same boiling point. In the alternative, no patentable distinction is seen to exist between the reference and the claimed invention because, as defined above, it is the examiners position that the hydrocarbonoxy end-blocked branched organopolysiloxanes, which are fluid, is volatile absent evidence and since applicants do not define the extent of non-volatility. In addition, since the reference uses the same volatile siloxanes they are expected (103) to have the same boiling point.

Claims 9-11 are rejected under 35 U.S.C. 103(a) as obvious over Garabedian et al. (406).

With respect to the amounts defined in instant claim 9, the reference teaches amounts which encompass the claimed amounts and therefore the subject matter as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made to have selected the overlapping portion of the range disclosed by the reference because overlapping ranges have been held to be a prima facie case of obviousness, see *In re Malagari*, 182 U.S.P.Q. 549; *In re Wertheim* 191 USPQ 90 (CCPA 1976).

With respect to the amounts defined in claims 10-11, all of the claimed amounts are defined by the reference, with the exception of the claimed amount of abrasive. However, this amount would have been obvious because the claimed invention uses "about' to define the

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amount, and as is well known, "about" permits some tolerance. *In re Ayers*, 154 F 2d 182, 69 USPQ 109.

Claim 15 is rejected under 35 U.S.C. 103(a) as obvious over Garabedian et al. (406).

The reference teaches a composition which is made by mixing all of the components together and although the process might not be in two separate stages (the emulsification step and the mixing (combining with abrasives)), no distinction is seen to exist because the change in sequence of adding ingredients would have been obvious to one of ordinary skill in the art absent evidence to the contrary. *In re Gibson* 5 USPQ 230. In addition, it is the examiners position that the initial formation of an emulsion would have been obvious to the skilled artisan in order to maximize the homogeneity of the water and siloxane prior to the addition of the abrasive.

Claims 1-4, 6-13, 17 and 18 are rejected under 35 U.S.C. 103(a) as obvious over John (692) in view of Terae (828).

John teaches in column 2, line 5-column 4, line 11, a composition comprising, in weight percent (1) 1-15% of an emulsifier (surfactant), (2) 0.5-10% of a mixture of an organosiloxane components (can contain octamethylcyclotetrasiloxane), (3) 0.1-5% of a thickener, (4) 5-70% of an abrasive (size of 1-400 microns and/or can be finely divided alumina) and (5) 10-60% of a water medium. Other components can be added, such as a stabilizer, etc. Although this reference teaches a polydiorganosiloxane, (1) it is the examiners position that this can be a volatile material absent evidence to the contrary, thus no "non-volatile silicone material" needs to be present and (2) assuming arguendo, the amount can be less than 0.2%, when calculated.

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Terae teaches in the abstract and column 6, lines 17-20 that polypropylene glycol functions as a stabilizer to stabilize an emulsion based of a siloxane material.

The primary reference teaches a composition which comprises all of the claimed components with the exception of polypropylene glycol. The use of this component in the composition of the primary reference would have been obvious because said reference teaches that the composition can contain a stabilizer and it is the examiners position that polypropylene glycol is within the scope of this additive because Terae teaches that this material is a known stabilizer for siloxane based emulsions. It is the examiners position that this function is irrespective of the siloxane being volatile or non-volatile absent clear evidence to the contrary.

With respect to the amount of polypropylene glycol, as recited in claims 9-11, John teaches that this component can be used (as a stabilizer for the reasons defined above) and it is the examiners position that the amount of this component would have been obvious through routine experimentation and optimization to produce to most optimized stabilized emulsion using this stabilizer to stabilize the siloxane emulsion defined by John. The amounts of the other components are clearly disclosed by John.

Claims 5 and 14 are rejected under 35 U.S.C. 103(a) as obvious over John (692) in view of Terae (828), as applied to claim 1 above and further in view of Martin et al. (027).

The teachings of Martin are set forth in the previous office action which are incorporated herein by reference.

With respect to the solvent of claim 5, although John (692) in view of Terae (828) does not teach the inclusion of this component, it is the examiners position that said component would

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have been obvious because polishing (i.e. scouring) compositions are known to contain a hydrocarbon solvent/water mixture as the medium in which the components are dispersed (see Martin). In view of this, the use of any known scouring medium as the medium according to the teachings of John (692) in view of Terae would have been well within the scope of the skilled artisan.

With respect to the amounts defined in claim 14, as defined in the above rejection and by John, the amounts of all the components, except the hydrocarbon solvent, are defined (see the amounts disclosed by John and the obviousness determination of the amount for the polypropylene glycol component defined above). The amount of hydrocarbon solvent would have been obvious because Martin teaches a conventional amount for this component when used in scouring composition and since its use in the composition according to John is obvious for the above reasons, one skilled in the art would have appreciated that the amount can also be within the scope of the amount defined by Martin.

Claim 15 is rejected under 35 U.S.C. 103(a) as obvious over John (692) in view of Terae (828).

The combined reference teaches a composition (see above) which is made by mixing all of the components together and although the process might not be in two separate stages (the emulsification step and the mixing (combining with abrasives)), no distinction is seen to exist because the change in sequence of adding ingredients would have been obvious to one of ordinary skill in the art absent evidence to the contrary. *In re Gibson* 5 USPQ 230. In addition, it is the examiners position that the initial formation of an emulsion would have been obvious to

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the skilled artisan in order to maximize the homogeneity of the water and siloxane prior to the addition of the abrasive.

Applicant's arguments with respect to all the claims have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael A. Marcheschi whose telephone number is (571) 272-1374. The examiner can normally be reached on M-F (8:00-5:30) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on (571) 272-1233. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (MI-free).

11/06 MM Michael A Marcheschi Primary Examiner Art Unit 1755